

**GROUNDWATER MONITORING REPORT ANNUAL EVENT
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BRC Former C-6 Facility
Los Angeles, California

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The Lakewood Formation (DWR, 1961), includes all of the upper Pleistocene sediments in the Los Angeles Coastal Plain area. The deposits are of both marine and continental origin, representing stream transport and sedimentation along the Pleistocene marine plain. In the Site area, the Lakewood Formation may include the Semi-perched aquifer, the Bellflower Aquiclude, and the Gage Aquifer. The Semi-perched aquifer includes deposits described as Terrace Cover (Poland and others, 1959). Based on correlations of Site stratigraphic data to data from adjacent sites, it appears that the Semi-perched aquifer is absent at the Site. The Bellflower Aquiclude is a heterogeneous mixture of continental, marine, and wind-blown sediments, mainly consisting of clays with sandy and gravelly lenses (DWR, 1961). The base of the Bellflower Aquiclude is about 100 feet below sea level or about 150 feet below ground surface (bgs) in the Site area. The Gage Aquifer is a water-bearing zone of fine to medium sand and gravel confined by the Bellflower Aquiclude. It is reported to be about 40 feet thick in the Site area.

The Lakewood Formation is underlain by the Lower Pleistocene San Pedro Formation, which continues to about 1,000 feet bgs in the Site area. Major water-bearing zones within the San Pedro Formation are the Lynwood Aquifer and the Silverado Aquifer. These are reported to be about 300 and 500 feet bgs respectively, in the Site area (DWR, 1961). The Silverado Aquifer is an important groundwater source in the Coastal Plain and is considered a source of drinking water (DWR, 1961).

2.4 Site Geology and Hydrogeology

2.4.1 Site Geology

Groundwater monitoring wells and soil borings drilled at the Site have encountered the Lakewood Formation. The majority of the monitoring wells extend to approximately 90 feet bgs. Two monitoring wells extended to 140 feet bgs. The top 20 to 50 feet below the site are mainly fine-grained soils (predominantly silts and clays) that become thicker to the east. A sandy zone that dips downward to the east underlies the fine-grained soils. The sandy zone is generally 80 to 100 feet thick and contains discontinuous layers of fine-grained sediment that also dip down to the east. Although the fine-grained layers within the sandy unit are discontinuous, there are two separate fine-grained layers that are relatively continuous. Beneath some areas of the Site, the discontinuous fine-grained units overlap. The sandy unit is underlain by another fine-grained zone at approximately 110 to 120 feet bgs.

2.4.2 Site Hydrogeology

Groundwater conditions at the site are known from previous investigations and from the quarterly groundwater monitoring program (Kennedy/Jenks Consultants, 2000a). Groundwater samples from monitoring wells at the Site have been collected and analyzed on a regular basis since 1987. The uppermost groundwater at the Site appears to be under water table conditions at depths of 60 to 70 feet bgs. Regionally, this uppermost groundwater appears to be within relatively permeable sediments of the Bellflower Aquiclude. Monitoring wells at the Site are completed in two zones. Most of the wells are completed at or near the water table, at depths of



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